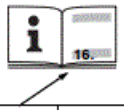
metabo MA-MS 25 Pole Pruner Attachment Instruction Manual

Contents

Metabo MA-MS 25 Pole Pruner Attachment

Original instructions

Declaration of Conformity

		MA 36-18 LTX BL Q & MA-MS 25 *1) Serial Number 01725.. & 01727.. MA-MS 25 Serial Number 01727..
L_{max}	cm (in)	25 (10")
L	cm (in)	24 ($9\,^{7}/_{16}$)
v_K	m/s (ft/min)	16 (3150) / 18 (3543)
K_T	-	3/8" LP
K_A	-	39
K_S	mm (in)	1,3 (0.05)
V_{Oel}	ml	120
m	kg (lbs)	1,7 (3.7)
a_{h1}/k_h	m/s^2	3,22 / 1,5
a_{h2}/k_h	m/s^2	2,61 / 1,5
L_{pA}/k_{pA}	dB(A)	92,6 / 3
L_{WA}/K_{WA}	dB(A)	104,79 / 1,29
$L_{WA(M)}$ *7)	dB(A)	107
$L_{WA(G)}$ *8)	dB(A)	108

- We declare and accept sole responsibility for ensuring: these pole pruner identified by their type and serial number in connection with the cordless multifunction drive MA-36-18 LTX BL Q *1) conform to all relevant provisions of the directives *2) and standards *3), testreport *4), issuing test office *4), *5), technical documents at *6). 2000/14/EC: Conformity assessment procedures in accordance with Annex V.
- Measured sound power level *7), guaranteed sound power level *8)
- 2006/42/EC, 2000/14/EC, 2014/30/EU, 2011/65/EU
- EN 62841-1:2015, EN ISO 11680-1:2011 (partly), EN ISO 11680-1:2021 (partly),
- EN ISO 12100:2010, EN IEC 63000:2018
- MD-345
- SGS Fimko Ltd, Takomotie 8 FI-00380 Helsinki, Finland, Notified Body No. 0598
- 2022-07-06, Bernd Fleischmann
- Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)

- Metabowerke GmbH – Metabo-Allee 1 – 72622 Nuertingen, Germany

For UK only:

- We as manufacturer and authorized person to compile the technical file, see *6) on hereby declare under sole responsibility that these pole pruner, identified by type and serial number *1) on page 3, fulfill all relevant provisions of following UK Regulations S.I. 2016/1091, S.I. 2008/1597, S.I. 2001/1701, S.I: 2012/3032 and Designated Standards EN 62841-1:2015, EN ISO 11680- 1:2011 (partly), EN ISO 11680-1:2021 (partly), EN ISO 12100:2010, EN IEC 63000:2018.
- **S. I. 2008/1597: UK-Type Examination:** No. MCA 2680; Approved Body acc. to Appendix IX: ID-No. 0120; SGS United Kingdom Limited, Unit 12A & 12B, Bowburn South Ind Est Durham, DH6 5AD United Kingdom (GB)

Specified Conditions of Use

- The pole pruner attachment, in combination with the cordless multifunction drive MA 36-18 LTX BL Q, is designed for sawing through branches (max. diameter: 20 cm (3/4“), across the grain.
- It must be used only for machining wood. Do not use it to fell trees. Do not cut roots, do not work close to the ground. Do not machine any hazardous materials.
- Use only the recommended cutting sets (guide rail and sawing chain). The use of other tools can lead to serious injuries.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- This pole pruner attachment is intended for attachment to an original Metabo cordless multifunction drive with the designation MA 36-18 LTX BL Q.
- Use only with the cordless multifunction drive in place. The operating manual for the cordless multidrive must be observed.
- National regulations may restrict the use of the device.
- The user bears sole responsibility for any damage caused by inappropriate use.
- Generally accepted accident prevention regulations and the enclosed safety information must be observed.

General Safety Information

- For your own protection and for the protection of your power tool, pay attention to all parts of the text that are marked with this symbol!
- **WARNING** – Read the operating instructions to reduce the risk of injury.
- WARNING – Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- Save all warnings and instructions for future reference.
- Always include these documents when passing on your power tool.
- **Residual risks:** Even when the device is used as intended, there could be residual risks. Observe all safety warnings and instructions.

Possible hazards:

- Prolonged exposure to vibrations can cause injuries and neurovascular disorders (also called “Raynaud’s syndrome” or “white finger”), especially to people suffering from circulation disorders. The symptoms can regard the hands, wrists and fingers and are shown through loss of sensitivity, torpor, itching, pain and discolouring of or structural changes to the skin. These effects can be worsened by low ambient temperatures and/or by gripping the hand grips excessively tightly. If the symptoms occur, the length of time the machine is used must be reduced and a doctor consulted.

Special safety instructions

Safety instructions for pole pruners

- **a)** Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything. A moment of inattention while operating may cause entanglement of your clothing or body with the saw chain.
- **c)** Hold the machine by the insulated gripping surfaces only, because the saw chain may contact hidden wiring. Saw chains contacting a “live” wire may make exposed metal parts of the chain saw “live'” and could give the operator an electric shock.
- **d)** Wear eye protection. Further protective equipment for hearing, head, hands, legs and feet is recommended. Adequate protective equipment will reduce personal injury from flying debris or accidental contact with the saw chain.
- **e)** Do not operate the machine in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a chain saw in this manner could result in serious personal injury.
- **f)** Always keep proper footing and operate the machine only when standing on fixed, secure and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the machine.
- Pay attention to obstacles in the working area – danger of tripping.
- **g)** When cutting a limb that is under tension, be alert for spring back. When the tension in the wood fibres is released, the spring loaded limb may strike the operator and/or throw the machine out of control.
- **h)** Use extreme caution when cutting brush and saplings. The slender material may catch the saw chain and be whipped toward you or pull you off balance.
- **i)** Carry the machine by the two handles with the machine switched off and the saw chain away from your body. When transporting or storing the machine, always fit the guide bar cover. Proper handling of the machine will reduce the likelihood of accidental contact with the moving saw chain.
- **j)** Follow instructions for lubricating, chain tensioning and changing the bar and chain. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **k)** Cut wood only. Do not use the machine for purposes not intended. For example: do not use the machine for cutting metal, plastic, masonry or non-wood building materials. Use of the machine for operations different than intended could result in a hazardous situation.
- **m)** Follow all instructions when clearing jammed material, storing or servicing the machine. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the machine while clearing jammed material or servicing may result in serious personal injury.

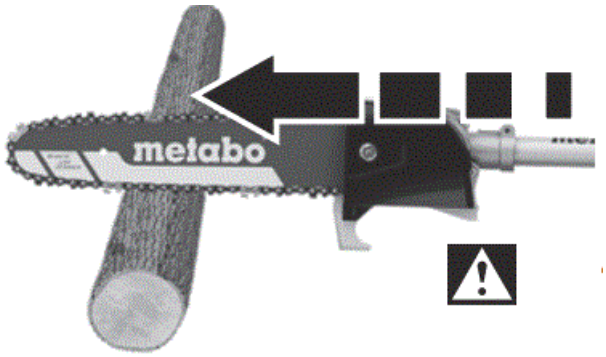
Causes and operator prevention of kickback

- Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and

pinches the saw chain in the cut.

- Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator.
  Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator.
- Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. As a machine user, you should take several steps to keep your cutting jobs free from accident or injury.
- Kickback is the result of machine misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
- **a)** Maintain a firm grip, with thumbs and fingers encircling the machine handles, with both hands on the saw. and position your body and arm to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the machine.
- **b)** Avoid adv erse body positions. This enables better control of the machine in unexpected situations.
- **c)** Only use replacement guide bars and saw chains specified by the manufacturer. Incorrect replacement guide bars and saw chains may cause chain breakage and/or kickback.
- **d)** Follow the manufacturer’s sharpening and maintenance instructions for the saw chain. Decreasing the depth gauge height can lead to increased kickback.

Additional Safety Instructions:



- Dangerous pull force: If the stop of the machine is not placed against the wood to be cut and – when cutting at the lower edge of the guide rail – the guide rail jams, or if the chainsaw meets a hard object in the wood, the chainsaw can be pulled forward For this reason, whenever possible, always place the stop of the machine against the wood.
- Inspect the wood for nails, cords, wires or loose parts and remove them before sawing.
- The machine is provided with a “Quick stop” function. Have the machine repaired if braking time is clearly lengthened.
- If the machine has been dropped or subjected to other impacts: Inspect the machine thoroughly to check for damage or other defects.
- Wear personal protective equipment and always wear safety glasses. Protective equipment such as dust mask, non-skid safety shoes, hard hat, protective gloves, tight-fitting protective clothing and hearing protection will reduce personal injuries.
- Keep at least 15 m distance to uninvolved persons.
- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

- Never use the guide rail as a lever.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- Do not operate the machine in bad weather conditions, especially when there is a risk of lightning. This reduces the risk to be hit by lightning.
- Switch off the machine and remove battery pack(s). Ensure that all moving parts have come to a standstill:
- if you leave the machine unattended;
- before clearing any blockages;
- before checking or cleaning the machine or before carrying out any work on the machine;
- if a foreign object has been hit or if the machine has been dropped. Check the machine for damage and have repairs carried out before putting the machine back into operation.
- when the machine starts to vibrate excessively.
- If the machine starts to vibrate with unusual strength, an immediate check is required:
- check for damage;
- replace or repair damaged parts;
- ensure that all nuts, bolts and screws are tightened.
- In the event of an accident or malfunction, switch off the machine immediately and remove the battery pack.
- Ensure the chainsaw is correctly tensioned. A loose chainsaw can jump up and cause serious or even fatal injuries.
- To prevent accidental starting: Always remove the battery packs before checking the chain tension, retightening the chain, changing the chain, eliminating faults and prior to every change of workplace.
- Remove battery packs from the machine. Wait until all moving parts have come to a standstill before making any adjustments, retrofitting, maintenance, cleaning or before storing the machine.
- Additional safety instructions in the operating manual for the cordless multifunction drive must be observed.

Reducing dust exposure:

- **WARNING** – Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- Lead from lead-based paints,
- crystalline silica from bricks and cement and other cement and other masonry products, and
- arsenic and chromium from chemically treated lumber.
- Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals,work in a wellventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
- This also applies to dust from other materials, such as some timber types (like oak or beech dust), metals, asbestos. Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.
- Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).
- Collect the particles generated at the source, avoid deposits in the surrounding area.
- Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled

manner.

- Use a suitable extraction unit.

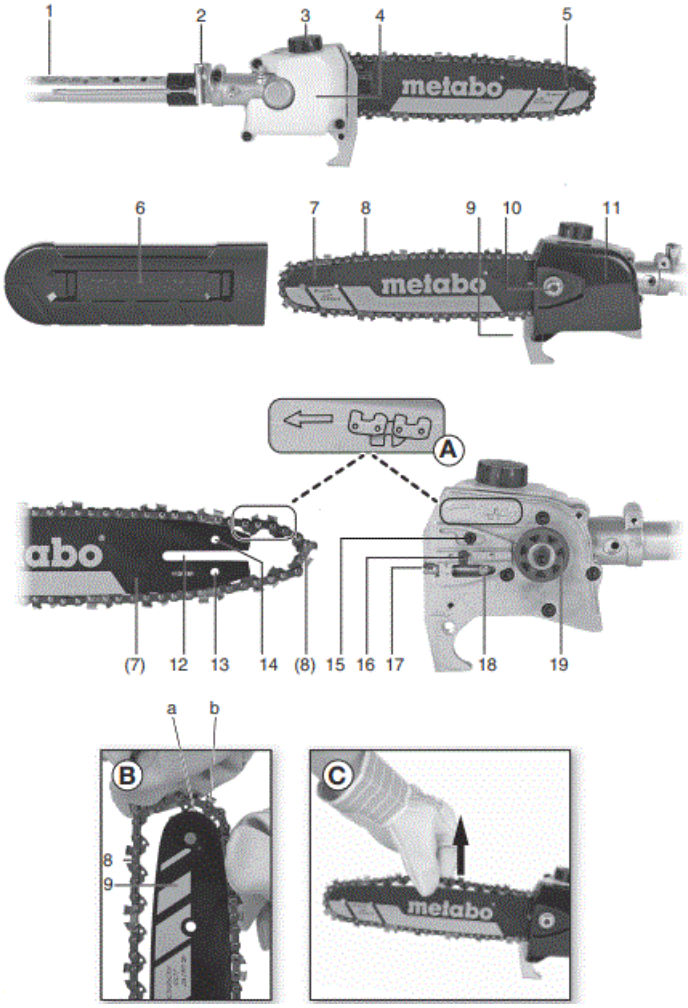
Reduce dust exposure with the following measures:

- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
- use an extraction unit and/or an air purifier,
- ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
- Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

Icons

- Wear safety goggles. Ejected parts can penetrate your eyes and cause serious injuries. Always wear protective goggles, if possible with side protection. If necessary, wear an additional face shield (visor).
- Wear hearing protection (earplugs or earmuffs). High noise levels over a prolonged period of time may affect your hearing.
- Wear head protection.
- Wear gloves.
- Wear non-slip foot protection.
- Read the operating instructions and all warning and safety instructions.
- **WARNING** – General hazards!
- **DANGER** – Always keep sufficient distance from power lines.
- Reduce the risk of fatal electric shock by never using the machine near electric wires. Touching or using the machine near power lines can result in serious injuries or fatal electric shock.
- **WARNING!** The unintentional start-up can cause serious injuries. Before cleaning or maintenance: Switch off the machine, remove the battery packs.
- Protect the device from water and moisture. Do not expose to rain. Never use it in rain or on wet trees.

Overview



1. Rod
2. Combination spanner (with clip to attach to the rod)
3. Sealing cap (chain lubricating oil)
4. See-through oil tank
5. Lubrication hole
6. Chainsaw guard
7. Guide rail (saw rail)
8. Sawing chain
9. Stop
10. Nut
11. Chain wheel cover
12. Guide rail slot
13. Bore
14. Guide rail oil inlet bore
15. Oil channel
16. Stud bolt
17. Clamping screw (chain tension)
18. Chain tensioning pin
19. Chain wheel

Initial Operation

Fitting guide rail and sawing chain, setting chain tension

- See illustration on
- **WARNING!** Remove the battery packs. An unintentional start-up can cause serious injuries. The machine must be stationary.
- Wear protective gloves.

1. Unscrew the nut (10) and take off the chain cover (11).
2. Mount the sawing chain (8) on the guide rail (7): See page 2, fig. A:
   The cutting edges of the sawing chain cutters (b) must point in the direction of rotation. Observe the symbol on the machine. See page 2, fig. B:
   Hold up the guide rail (7) at its front end and position the sawing chain (8) such that the teeth (a) of the deflector star of the guide rail engage in the chain links and the chain-driving links are seated in the guide rail groove.
3. Then place the sawing chain (8) around the chain wheel (19) and mount the guide rail with its slot (12) onto the stud bolt (16).
   If necessary, turn the tensioning screw (17) in such a way that the chain tensioning pin (18) engages in the hole (13) in the guide rail.
4. Refit the chain wheel cover (11) and fit the nut (10) but do not yet tighten.
5. Turn the clamping screw (17) clockwise until the sawing chain no longer sags at the lower edge of the guide rail. Raise the front end of the guide rail while doing this.
6. See page 2, fig. C: The sawing chain is correctly tensioned if it lies on the guide rail, in the middle of the guide rail it can be lifted 2 to 3 mm from the upper edge of the guide rail, it can still be moved easily by hand, without sticking.
7. After clamping the sawing chain, raise the front end of the guide rail and tighten the nut (10).

Chain lubricating oil

- The machine is delivered ex works without an oil filling. Prior to initial operation of the machine, the oil reservoir must be filled with lubricating oil.
- Use original Metabo chain lubricating oil only. Never use old oil!
- To fill with oil, unscrew the sealing cap (3). When filling the oil, ensure that no dirt gets into the oil reservoir. The oil level can be checked using the see-through oil tank (4).

Attach to the cordless multifunction drive

- Attach as shown in the operating instructions for the cordless multifunction drive.
- **WARNING!** A maximum of 2 extension rods may be installed between the cordless multifunction drive and the attachment.
- Attach the extension rods in the same manner.

Battery pack

- Read the operating instructions supplied with the cordless multifunction drive.

Allow new sawing chain to run-in

- Before sawing with a new sawing chain, allow it to run in for 2-3 minutes.
- After the run-in time, check the chain tension (as specified in chapter 6.3) and retighten the sawing chain if necessary.

Checking chain lubrication

- Never work without chain lubrication! Refill promptly.
- If the sawing chain is running dry, the guide rail and sawing chain are rendered unusable within a short time. It is therefore essential to check the oil level in the reservoir every time before starting work.
- To check the chain lubrication, hold the machine with the guide rail (and sawing chain running) at a safe distance of about approx. 20 cm over a light-coloured base, e.g. a spread-out newspaper). If increasingly large oil mark appears on the light-coloured base, the chain lubrication is working perfectly.

Use

Holding the machine correctly, Switching it on and off

- Before use, check that the device is correctly attached to the battery multifunction drive (read the operating instructions of the cordless multifunction drive).
- Use the shoulder strap. The operator must keep good footing and hold the machine firmly with both hands on the handles. The guide rail must not touch any objects when the machine is switched on.
  Switch on and off as described in the operating instructions for the cordless multifunction drive.
- The machine is provided with a “Quick stop” function. Have the machine repaired if the braking time is clearly lengthened.

Working with the machine

- Before starting work, always check that the machine is in perfect working order.

The following are particularly important:

- There is the risk to be hit by falling branches. Always keep sufficient distance to the branch you are sawing off.
- Avoid abnormal postures and never cut above shoulder height.
- Practice all work techniques. Inexperienced persons are strongly advised to seek competent advice and guidance from an experienced person before operating this machine.

Basic working method, sawing through branches and twigs

- Choose your location so that will not get hit by the falling branch.
- Hold the machine at an angle so that the angle between the rod (1) and the ground is a maximum of 60°.

- Start sawing on branches at the bottom so that the branches above have room to fall down.
- Saw off long branches in several steps.
- In order to avoid tearing off the bark: Do not make the final cut until you have sawn off most of the branch, thus reducing the weight.
- Pull the machine out of the wood only with the sawing chain running.
- Do not work close to the ground. The guide rail must not touch the ground because this would cause the sawing chain to become blunt very quickly.

1. Press the machine with the stop (9) against the wood. The chain must not touch the wood when it is switched on. Switch on the machine and only then start sawing by guiding the saw downwards. Do not press, the saw's own weight is sufficient. Towards the end of the cut, take the weight off the saw. Prepare yourself for the weight of the saw that you will have to support when the saw has cut through the branch.
2. To maintain full control of the machine at the actual "cut-through" point, reduce the acting weight force of the saw without loosening your firm hold on the machine handles.
3. After completing the cut, switch off the motor, wait for the sawing chain to come to a stop before removing the machine. Always switch off the machine before moving from branch to branch.

- Never attempt to free a jammed saw with the motor running. Switch off the motor and remove battery packs. If the branch can be reached from the ground, hold the saw firmly and lift the branch. If the saw is still stuck, seek professional help.
- Do not use the saw as a lever.

Retensioning the sawing chain

- When working with the machine, the sawing chain expands as a result of heat. It then starts to sag and can jump out of the guide rail groove.
- Check the chain tension (as specified in chapter 6.1) and retighten the sawing chain if necessary.
- If the sawing chain is retensioned when it is hot, at the end or work it must be slackened because otherwise cooling could result in high contraction tension.

Insufficient chain lubrication

- If the oil reservoir is still almost full after machine operation of around 3- 5 minutes, it may be that the oil channel (15) of the machine, or the oil inlet bore (14) of the guide rail, is obstructed and has to be cleaned.

Transporting

- Remove the battery packs, allow the machine to come to a standstill. Slide the protective cover (6) onto the guide rail (7).
- Secure the machine during transport to prevent oil loss, damage or injury.

Cleaning

- Remove the battery packs, allow the machine to come to a standstill. Clean after each use: Remove contamination, wood shavings etc. (e.g. with a brush or cloth).

Storage

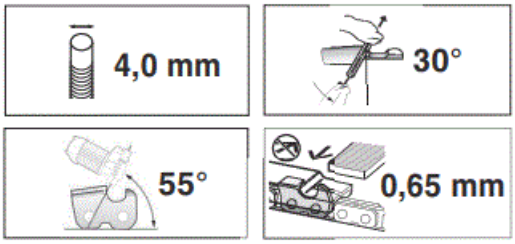
- Remove the battery packs, allow the machine to come to a standstill. Slide the protective cover (6) onto the guide rail (7).
- Clean and maintain the machine before storage.
- Store in a secure, dry place out of the reach of children.

Maintenance

- **WARNING!** Remove the battery packs . Unintentional start-up can cause serious injuries. The machine must be stationary. Wear protective gloves.
- Carefully maintain machine tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation on a daily basis. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

Sawing chain

- Working with a blunt sawing chain causes premature wear of the sawing chain, the chain wheel and the guide rail. It can also cause the sawing chain to break. It is therefore important that the sawing chain is sharpened in good time.
- Sharpening should be carried out by a specialist workshop.
- The sawing chain cutters have the following angles: cutting angle = 55°, sharpening angle = 30°. A 4.0-mm round file is required to sharpen the sawing chain. Use a flay file to file the depth gauge to a height of 0.65 mm.



Replace the sawing chain if:

- The length of the cutting edges is less than 5 mm.
- There is too much space between the driving links and the rivets.
- The cutting speed is too slow.
- The cutting speed cannot be increased even after sharpening the sawing chain multiple times.
- For replacement sawing chains, refer to the Accessories chapter.

Guide rail

- Occasionally, some ball bearing grease must be applied (with a grease gun, not provided) through the lubrication holes (5) for the deflector star at the front end of the guide rail.
- The lower edge of the guide rail is particularly susceptible to wear. To avoid one-sided wear of the guide rail, it should be turned every time the sawing chain is sharpened. If necessary: Debur the edges and file the edges flat with a flat file.
- You should also take this opportunity to clean the groove and the oil inlet bores (14) of the guide rail.

Replace the guide rail if

- The groove does not match the height of the driving links (which must never touch the underside).
- If the inside of the guide rail is worn and the sawing chain tends towards one side as a result.
- If the guide rail is replaced, the sawing chain must also be replaced. For replacement guide rails, refer to the Accessories chapter.

Chain wheel

- If the chain wheel (19) shows signs of greater wear (deep indentations), it must be replaced. See the chapter on Repairs.

Lubrication

- Every 40 operating hours, top-up grease through the grease nipple on the gearbox housing using a grease gun: 12 g high-temperature composite lithium grease

Troubleshooting Guide

- When attaching to the cordless multidrive, the rod ends cannot be pushed into each other.
- Read the operating instructions supplied with the cordless multifunction drive.
- The machine switches off during sawing.
- Is the saw chain (8) tensioned too much? See Chapter 6.1.
- Too much pressure applied when sawing? See Chapter 7.2.
- Is the guide rail defective? (bent, damaged…)?
- Sawing chain (8) blunt? See Chapter 11.
- Wood shavings under the sprocket cover (11) cause a blockage. Clean.
- No chain lubricating oil is supplied.
- Is the oil container empty? See chapter 6.2.
- Oil channel (15) or oil inlet bore (14) contaminated? See chapter 7

Accessories

- Use only original Metabo or CAS (Cordless Alliance System) battery packs and accessories.
- Use only accessories that fulfill the requirements and specifications listed in these operating instructions.
- **A** Cordless multifunction drive MA 36-18 LTX BL Q, order no.: 601725850
- **B** Shaft extension order no.: 628498000

- **C** Bio chainsaw adhesive oil order no.: 628441000
- **D** Saw chain (as replacement) order no.:628497000
- **E** Guide rail (as replacement), order no.: 628496000
- For a complete range of accessories, see **www.metabo.com** or the catalog.

Repairs

- Repairs to electrical tools must ONLY be carried out by qualified electricians!
- Only original Metabo spare parts should be used.
- Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see **www.metabo.com**.
- You can download a list of spare parts from **www.metabo.com**.

Environmental Protection

- Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.
- Packaging materials must be disposed of according to their labelling in accordance with municipal guidelines. Further information can be found at **www.metabo.com** in the “Service” section.
- Battery packs may not be disposed of with regular waste. Return faulty or used battery packs to your Metabo dealer!
  Do not allow battery packs to come into contact with water!
- Only for EU countries: never dispose of power tools in your household waste! According to European Directive 2012/19/EU on Waste from Electric and Electronic Equipment and implementation in national law, used power tools must be collected separately and recycled in an environmentally-friendly manner.
- Discharge the battery pack in the power tool before disposal. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

Technical Data

- Explanatory notes on the specifications on page 3. Subject to change in accordance with technical progress.
- Measured values were determined with cordless multifunction drive MA 36-18 LTX BL.
- **Lmax** =Guide rail length
- **L =** Usable blade cutting length
- **vK =** Chain speed in idling
- **KT =** Sawing chain, spacing
- **KA =** Sawing chain, number of driving links
- **KT =** Sawing chain, driving link thickness
- **VOil =** Oil reservoir volume
- **m** = weight (without cordless multifunction drive, battery pack, oil, guide rail, saw chain, shoulder strap)
- Measured values determined in conformity with EN 62841 + EN ISO 11680-1.
- Permitted ambient temperature during operation: 20 °C to 50 °C (limited performance with temperatures below 0 °C). Permitted ambient temperature for storage: 0 °C to 30 °C
- The recommended ambient temperature when charging: 0 °C to 40 °C direct current

- The technical specifications quoted are subject to tolerances (in compliance with relevant valid standards).

Emission values

- These values make it possible to assess the emissions from the power tool and to compare different power tools. The actual load may be higher or lower depending on operating conditions, the condition of the power tool, or the accessories used.
- Please allow for breaks and periods when the load is lower for assessment purposes. Arrange protective measures for the user, such as organizational measures based on the adjusted estimates.
- Total vibration value (vector sum of three directions):
- **ah,1 =** vibration emission value (front handle)
- **ah,2 =** vibration emission value (rear handle)
- **Kh =** uncertainty (vibration)
- Typical A-effective perceived sound levels:
- **LpA** =sound pressure level
- **LWA** =sound power level
- **KpA,** KWA= uncertainty
- **LWA(M)** =measured sound power level as per 2000/ 14/EC
- **LWA(G)=** guaranteed sound power level as per 2000/14/EC
- During operation, the noise level can exceed 80 dB(A).
- Wear ear protectors!
- **Metabowerke GmbH**
- **Metabo-Allee 1**
- **72622 Nuertingen**
- **Germany**
- **www.metabo.com**
- **170 27 8820 – 1022**

Documents / Resources

	metabo MA-MS 25 Pole Pruner Attachment [pdf] Instruction Manual MA-MS 25 Pole Pruner Attachment, MA-MS 25, Pole Pruner Attachment, Pruner Attachment

References

- Metabo - Power Tools for professional users